PROJECT NUMBER:

8101

**PROJECT TITLE:** Cigarette Testing Services Division

SECTION LEADER: Joyce F. Stargardt PERIOD COVERED: February, 1988

## I. MARKET ACTIVITY

A. <u>Objective</u>: To monitor and report the introduction of new brands and modifications to existing brands on the domestic and international markets.

## B. Results:

## 1. <u>Domestic</u>

R. J. Reynolds has expanded the test market of Winston Lights with white tipping by introducing Winston Lights 85 with white tipping in Cleveland, Ohio. Winston Lights 100 cigarettes with white tipping were first test marketed in Cleveland, Ohio beginning December, 1987. The pamphlet accompanying these cigarettes says the reason for this change is that most people prefer white tipping on their low tar cigarettes. Winston Lights 85 and 100 are in national distribution with cork tipping. No changes were noted in the smoke deliveries between the white or cork tipped cigarettes.

## 2. <u>International</u>

Marlboro Lights King Size cigarettes have been introduced in the Japanese market. These cigarettes deliver 11 mg tar and 1 mg nicotine. These cigarettes are produced under a licensing agreement between Japan Tobacco, Inc. and Philip Morris.

R. J. Reynolds is exporting Island Lights King Size cigarettes to Japan. These cigarettes deliver 10 mg tar and 0.7 mg nicotine.

Japan Tobacco, Inc. is distributing Rivage 85 cigarettes with a triple aqua filter in the United Arab Emirates. This cigarette utilizes a "triple aqua-filter" which consists of an inner and outer cellulose acetate plug and a water-filled polyethylene capsule between the cellulose acetate plugs. The contents of the capsule are released into the smoke stream when the filter portion containing the capsule is squeezed on the blue line noted on the tipping paper. The advertising for this product claims: "you can enjoy smooth and refreshing flavor without harshness in the smoke thanks to the innovative absorption of smoke through the water-filled capsule." The TPM and water deliveries of this cigarette increase significantly after pinching the filter. The tar delivery is not affected by the release of the water because tar is defined as TPM-nicotine-water.

	Rivage 85		
	Before Pinching	After Pinching	Advertised on Pack
Butt Length, mm	38	38:	-
FTC Tar, mg/cigt.	11.5	12.3	111
TPM, mg/cigt.	13.9	18.3	-
Nicotine, mg/cigt	. 0.66	0.72	0.6
Water, mg/cigt.	1.7	5.3	-
Puffs/cigt.	5.5	5.6	_

# II. ANALYTICAL METHODS DEVELOPMENT AND SUPPORT

A. <u>Objective</u>: To evaluate and recommend analytical methods and new technology in support of programs for R&D and Manufacturing.

# B. Results:

# 1. Coal Removal

The coal removal instrument has been modified to test ultra slim (17 mm circumference) cigarettes. These cigarettes have been analyzed for percent coal removal and the conclusion from the testing is that the ultra slim cigarettes have a higher coal retention than observed on the regular (25 mm) circumference cigarettes. This is probably related to the higher rod density of these ultra slim cigarettes.

# 2. Special Menthol Projects

The average menthol level of "inner" versus "outer" cigarettes was compared for three mentholated foil products - Marlboro Lights Menthol 85 (SP), Marlboro Lights Menthol 83 (Box), and Marlboro Menthol 85. Benson & Hedges Menthol 100 (SP) (conventional menthol spray application) was analyzed as a control. Samples were analyzed thirty and sixty days after manufacture. The results for the thirty day evaluation showed that the menthol level of the "inner" cigarettes was statistically lower (about 0.1 mg) than that of the "outer" cigarettes. This result was attributed to the slower migration of the menthol from the foil to the "inner" cigarettes because of their location in the pack. No statistical difference was observed for the control. For the sixty day evaluation, similar statistical differences were observed. However, for the Marlboro Lights Menthol 83 (Box), the menthol level of the "outer" cigarettes was statistically lower than that of the "inner" cigarettes. This result may be attributed to absorption of menthol from the "outer" cigarettes by the box. Although the menthol levels of the "inner" and "outer" cigarettes for the mentholated foil products were found to be statistically different in both the thirty and sixty day evaluations, a subjective difference may not be detectable.